CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL VALLEY REGION

ORDER NO. R5-2005-____

NPDES NO. CA0082201

MONITORING AND REPORTING PROGRAM
FOR
KAWEAH RIVER ROCK CO.
SAND AND GRAVEL PLANT
TULARE COUNTY

Specific sample station locations shall be established with concurrence of the Regional Board's staff, and the Discharger shall attach a description of the stations to this Monitoring and Reporting Program. All analyses shall be performed in accordance with the latest edition of *Guidelines Establishing Test Procedures for Analysis of Pollutants*, promulgated by EPA (40 CFR 136) or other procedures approved by the Regional Board. Method Detection Limits (MDLs) and Minimum Levels (MLs) shall be reported for each constituent in all monitoring reports. All monitoring and reporting shall conform with SIP Reporting Requirements, Section 2.4 et seq. In particular, the reported MLs shall be at least as low as the lowest ML for each priority pollutant specified in Appendix 4 of the SIP. In reporting data, the Discharger shall indicate whether any analysis was performed using a method not in conformance with EPA's Guidelines.

EFFLUENT MONITORING

Effluent samples shall be collected at Discharge Point 001 downstream from the last connection through which wastes can be admitted to respective disposal sites. Effluent samples shall be representative of the volume and quality of the discharge. Time of collection of samples shall be recorded. Effluent monitoring shall include at least the following:

Constituents	Units	Type of Sample	Sampling Frequency
Flow	mgd	Metered	Daily
EC at 25°C	µmhos/cm	Grab	Twice/week
Settleable Solids	mL/L	Grab	Weekly
Total Suspended Solids	mg/L	Grab	Weekly
Chloride	mg/L	Grab	Weekly

Constituents	Units	Type of Sample	Sampling Frequency
Boron	mg/L	Grab	Weekly
pH	standard units	Grab	Weekly
Hardness	mg/L	Grab	Weekly
Iron[3]	mg/L	Grab	Monthly
Manganese[3]	mg/L	Grab	Monthly
Oil and Grease[1]	mg/L	Grab	Annually
Acute Toxicity [4]	%Survival	24-hr composite[2]	Once per permit term

1 USEPA Test Method 413.1.
2 Composite samples shall be flow proportional composite samples.
3 Dissolved concentrations.
4 The acute bioassays samples shall be analyzed using methods in EPA-821-R-02-012, Fifth Edition, or later amendment with Board staff approval. Temperature and pH shall be recorded at the time of bioassay sample collection. Test species shall be fathead minnows (Pimephales promelas).

If the discharge is intermittent rather than continuous, the Discharger shall monitor and record data for all of the constituents listed above on the first day of each intermittent discharge and thereafter the frequencies in the schedule shall apply. In no event shall the Discharger be required to monitor and record data more often than twice the frequencies listed in the schedule.

If results of monitoring a pollutant appear to violate effluent limitations, the frequency of sampling must be increased to daily until compliance is verified.

RECEIVING WATER MONITORING

All receiving water samples shall be grab samples. Receiving water samples shall be taken when there is a discharge to the St. Johns River and when there is water in the river. Receiving water monitoring shall include at least the following:

Station	Description
R-1	100 feet upstream from the point of discharge.
R-2	100 feet downstream from the point of discharge.

Constituents	Units	Station	Sampling Frequency
Flow	mgd	R-1	Weekly
EC at 25°C	µmhos/cm	R-1, R-2	Weekly
pH	standard units	R-1, R-2	Weekly
Turbidity	NTU	R-1, R-2	Weekly
Hardness	mg/L	R-1, R-2	Monthly

In conducting the receiving water sampling, a log shall be kept of the receiving water conditions throughout the reach bounded by R-1 and R-2. Attention shall be given to the presence or absence of:

a. Floating or suspended matter
b. Discoloration
c. Bottom deposits
d. Aquatic life
e. Visible films, sheens or coatings
f. Fungi, slimes, or objectionable growths
g. Potential nuisance conditions

Notes on receiving water conditions shall be summarized in the monitoring report.

CALIFORNIA TOXICS RULE MONITORING

A. Priority Pollutants

The State Water Resources Control Board (SWRCB) adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (known as the State Implementation Policy or SIP). **The SIP states that the Regional Boards will require periodic monitoring for pollutants for which criteria or objectives apply and for which no effluent limitations have been established.** Accordingly, the Regional Board is requiring, as part of this Monitoring and Reporting Program, that the Discharger conduct **effluent monitoring and receiving water monitoring** of priority pollutants **on or before 28 July 2009**. The list of priority pollutants and required minimum levels (MLs) (or criterion quantitation limitations) is included as Attachment D. The Discharger must analyze **pH and hardness** at the same time as priority pollutants.

All analyses shall be performed at a laboratory certified by the California Department of Health Services. The laboratory is required to submit the Minimum Level (ML) and the Method Detection Limit (MDL) with the reported results for each constituent. The MDL should be as close as practicable to the USEPA MDL determined by the procedure found in 40 CFR Part 136. The results of analytical determinations for the presence of chemical constituents in a sample shall use the following reporting protocols:

a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory.
b. Sample results less than the reported ML, but greater than or equal to the laboratory's MDL, shall be reported as "Detected but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.
c. For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration." Numerical estimates of data quality may be by percent accuracy (+ or – a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.
d. Sample results that are less than the laboratory's MDL shall be reported as "Not Detected" or ND.

B. Dioxin

The Discharger shall test effluent and receiving water for each of the 17 TCDD congeners listed in Table 4, *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (SIP). The Discharger shall report the analytical results of the effluent monitoring for each congener, including the minimum quantifiable level (ML) and the minimum detection level (MDL), and the measured or estimated concentration. The Discharger shall multiply each measured or estimated congener concentration by its respective toxicity equivalence factor (TEF) value and report the sum of these values. The Discharger must monitor for the presence of the 17 congeners on or before **28 July 2009**. Results of sampling shall be submitted on or before **26 October 2009.** Reporting shall conform with SIP Reporting Requirements Section 2.4 et seq.

THREE SPECIES CHRONIC TOXICITY MONITORING

Chronic toxicity monitoring shall be conducted to determine whether the effluent is contributing toxicity to the receiving water. The testing shall be conducted as specified in EPA-821-R-02-013*, Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms,* Fourth Edition, October 2002. Composite samples of the effluent shall be collected prior to discharge to St. John's River. Twenty-four hour composite samples shall be representative of the volume and quality of the discharge. Time of collection samples shall be recorded. Dilution waters shall be collected upstream of the discharge to the St. Johns River. The sensitivity of the test organisms to a reference toxicant shall be determined concurrently with each bioassay and reported with the test results. Both the reference toxicant and effluent test must meet all

test acceptability criteria as specified in the chronic manual. If the test acceptability criteria are not achieved, then the Discharger must re-sample and re-test within 14 days. Chronic toxicity monitoring shall include the following:

Species: *Pimephales promelas*, *Ceriodaphnia dubia* and *Selenastrum capriconicutum*
Frequency: By **28 July 2009**

	Dilutions (%)					Controls	
	100	50	25	12.5	6.25	St. John's River	Lab Water
% Effluent	100	50	25	12.5	6.25	0	0
% Dilution Water[1]	0	50	75	87.5	93.75	100	0
% Lab Water[2]	0	0	0	0	0	0	100

1 Dilution water shall be receiving water taken upstream from the discharge point. The dilution series may be altered upon approval of Regional Board staff.
2 Lab water shall meet EPA protocol requirements

GROUNDWATER MONITORING

Groundwater monitoring shall commence as required by **Provision E.5** of WDRs Order No. _____. Prior to collecting samples and after measuring the water level, each monitoring well shall be adequately purged to remove water that has been standing within the well screen and casing that may not be chemically representative of formation water. Depending on the hydraulic conductivity of the geologic setting, the volume removed during purging typically does not exceed 3 to 5 volumes of the standing water within the well casing and screen, or additionally the filter pack pore volume. At least quarterly and concurrently with groundwater quality sampling, the Discharger shall measure the water level in each well as groundwater depth (in feet and hundredths) and as groundwater surface elevation (in feet and hundredths above mean sea level-MSL). Samples shall be collected from approved monitoring wells and analyzed for the following constituents:

Constituents	**Units**	**Type of Sample**	**Sampling Frequency**
Groundwater Depth	Feet	Measurement	Quarterly[1,2]
Groundwater Elevation	Feet above MSL	Measurement	Quarterly[1,2]
Total Dissolved Solids	mg/L	Grab	Quarterly[1,2]
pH	pH Units	Grab	Quarterly[1,2]
EC @25°C	µmhos/cm	Grab	Quarterly[1,2]
Chloride	mg/L	Grab	Quarterly[1,2]

Boron	mg/L	Grab	Quarterly[1,2]
Iron[3]	mg/L	Grab	Quarterly[1,2]
Manganese[3]	mg/L	Grab	Quarterly[1,2]
Arsenic[3]	µg/L	Grab	Quarterly[1,2]

1. January, April, July, and October
2. Designated background wells shall be monitored monthly for at least one year.
3. Dissolved concentration.

REPORTING

Monitoring results shall be submitted to the Regional Board by the **1st day of the second month** following sample collection. Quarterly monitoring results shall be submitted by the **1st day of the second month** following the end of each calendar quarter (i.e., by 1 February, 1 May, 1 August, and 1 November) following each calendar quarter. Annual monitoring results shall be submitted by 1 February of each year.

In reporting the monitoring data, the Discharger shall arrange the data in tabular form so that the date, the constituents, and the concentrations are readily discernible. The data shall be summarized in such a manner to illustrate clearly whether the discharge complies with waste discharge requirements. The highest daily maximum for the month should be determined and recorded.

If the Discharger monitors any pollutant at the locations designated herein more frequently than is required by this Order, the results of such monitoring shall be included in the calculation and reporting of the values required in the discharge monitoring report form. Such increased frequency shall be indicated on the discharge monitoring report form.

By **1 February of each year**, the Discharger shall submit a written report to the Executive Officer containing the following:

a. The names and telephone numbers of persons to contact regarding the plant for emergency and routine situations.

b. A statement certifying when monitoring instruments and devices for purposes of assuring compliance with this Order were last calibrated, including identification of who performed the calibration.

The Discharger may also be requested to submit an annual report to the Regional Board with both tabular and graphical summaries of the monitoring data obtained during the previous year. Any such request shall be made in writing. The report shall discuss the facility's compliance record. If violations have occurred, the report shall also discuss the corrective actions taken and planned to bring the discharge into full compliance with the waste discharge requirements.

All reports submitted in response to this Order shall comply with the signatory requirements of Standard Provision D.6.

The Discharger shall implement the above monitoring program on the first day of the month following effective date of this Order.

Ordered by: _____
THOMAS R. PINKOS, Executive Officer

_____
Date